

Title (en)
Method for making titanium dioxide with variable sinter activity

Title (de)
Verfahren zur Herstellung von Titandioxid mit variabler Sinteraktivität

Title (fr)
Procedé de production d'oxyde de titane à activité de concrétion variable

Publication
EP 1997781 B1 20140716 (DE)

Application
EP 07108639 A 20070522

Priority
EP 07108639 A 20070522

Abstract (en)
[origin: EP1997781A1] Crystalline titanium dioxide powder in the form of aggregated primary particles has BET surface area of 70-100 m²/g and rutile content of greater than 10-40%. An independent claim is included for preparation of the titanium dioxide powder introducing titanium tetrachloride vapor, and separately hydrogen, air or oxygen-enriched air into a mixing chamber; subsequently igniting the mixture in a burner and the flame is burned into a reaction chamber; subsequently separating the solid from gaseous substances, where the amounts used to achieve the BET surface area of 70-100 m²/g and the rutile content of greater than 10-40% are selected so that the equation $A=10^{5 \times \left\{ \left[\frac{(\text{TiCl}_4 \times \text{H}_2)}{(\text{amount of air} \times \text{total gas})} \right] / \text{BET} \right\}}$ (where A is 0.1-0.4) is obeyed and the unit of TiCl₄, H₂, amount of air and total gas is kmol/hour, that of the BET surface area is m²/g and that of A is 10⁵ g/m².

IPC 8 full level
B01J 37/02 (2006.01); **B01J 21/06** (2006.01); **B01J 35/00** (2006.01); **B01J 35/10** (2006.01); **B01J 37/34** (2006.01); **C01G 23/07** (2006.01); **C04B 35/626** (2006.01)

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DOCDB simple family (application)
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